NOTES ON THE BIRDS OF CRANBERRY GLADES, POCAHONTAS COUNTY, WEST VIRGINIA

BY MAURICE G. BROOKS

High up in the Allegheny Mountains of West Virginia is a region known as Cranberry Glades, a place of unusual interest to naturalists in general, and to bird-lovers in particular. Located in Pocahontas County, in the southeastern part of the state, it forms a meeting place for many northern and southern forms. West Virginia never having been glaciated, the reedy bogs and lakes that are so common northward are almost entirely absent, and the few glades that do occur are worthy of special note.

Pocahontas County lies almost entirely above the 2.000 foot contour mark, and is mountainous throughout. The Cranberry Glades are at a level of about 3,100 fcet, and surrounding them are ranges that rise to 4,600 feet. Some 300 acres are included in the glades region, the whole suggesting in appearance a northern muskeg. As the name implies, Cranberries (*Vaccinium*) of two species are abundant, and with these may be found round-leaved sundew, bog rosemary, buckbean, cotton grass, horned bladderwort, and other plants suggestive of a more northern region. Around the fringes of the open glades are dense thickets of alder, with balsam fir. red spruce, and quaking aspen coming in as firmer ground is reached.

As an indication of the possibilities for the collector, it might be well to note that E. A. Preble, of the U. S. Biological Survey, and Fred E. Brooks, of the U. S. Department of Agriculture, secured here in July, 1909, specimens of the yellow-cheeked meadow mouse (*Microtus chrotorrhinus*) a species not previously reported south of the Adirondack Mountains.

Some of the ridges surrounding the glades are densely wooded with mixed spruce and deciduous forests, while on others there are open, park-like areas characterized by groves of crataegus. Where the timber has been lumbered out, dense thickets of fire cherry have occupied the spaces, so that the region offers a wide variety of conditions for the observer. Some years ago there was a lumber railroad which reached the glades, but this has been abandoned, and the territory is now accessible only to those pedestrians who are willing to hike five miles, drawn by the lure of the unusual.

Observations recorded in these notes were made on three different trips, the first about the middle of June, 1914, the second in early September, 1925, and the third in late May, 1926. Opportunity was thus given to see something of both spring and fall migrations, while the June trip gave a week to the summer resident species.

One hundred and three species and forms were listed as follows: AMERICAN WOODCOCK. *Philohela minor*. Several seen both in 1914 and in 1926. The abundance of their borings noted in the sand and muck banks around the alder swamps seems to indicate that the species is common. Mr. Frank Houtchens, a trapper of this region, reports that he has several times found "Snipe's" nests in the snows of late spring, and says that he has seen the old bird on the nest with only her head above the snow.

SOLITARY SANDPIPER. Tringa solitaria solitaria. One observed along a branch of Cranberry River September 7, 1925.

SPOTTED SANDFIPER. Actitis macularia. Common summer resident along Cranberry River, which flows out of the glades.

HUDSONIAN CURLEW. Numerius hudsonicus. A single specimen of this bird was collected May 25, 1926, by A. B. Brooks, C. L. Brooks, and the author. When seen, the bird was nervously running about on the sphagnum of Big Glade. The specimen is deposited in the State University Museum. at Morgantown. W. Va. This is the only recorded occurrence of the species within the state.

BOB-WHITE. Colinus virginianus virginianus. Apparently not common here. One heard calling on the uplands above the glades September 7, 1925.

RUFFED GROUSE. Bonasa umbellus umbellus. Seen on all three trips. Commonly found dusting themselves along the old lumber railroad right-of-way.

TURKEY VULTURE. Cathartes aura septentrionalis. Occasionally seen flying above the glades. Very abundant in more settled parts of the region.

MARSH HAWK. *Circus hudsonius*. One observed September 7, 1925. Its breeding here is a possibility, but this has not been definitely recorded.

SHARP-SHINNED HAWK. Accipiter velox. Fairly common about the wooded ridges.

COOPER'S HAWK. Accipiter cooperi. Seen less frequently than the last.

RED-TALLED HAWK. Buteo borealis borealis. Often seen circling high in the air above the glades.

RED-SHOULDERED HAWK. Buteo lineatus lineatus. Circling and calling, thus making itself frequently conspicuous.

BROAD-WINGED HAWK. Buteo platypterus platypterus. A pair of these birds, giving their characteristic whistle, were seen repeatedly on the June, 1914, visit.

SPARROW HAWK. Cerchueis sparveria sparveria. Commonly seen in the dead trees about the edges of the glades.

BARRED OWL. Strix varia varia. The varied notes of this species help to make the nights on the glades interesting.

SCREECH OWL. Otus asio asio. Heard commonly.

GREAT HORNED OWL. Bubo virginianus virginianus. In the owl chorus this fellow carries an abundant bass. Frequently heard in broad daylight about the glades.

YELLOW-BILLED CUCKOO. Coccyzus americanus americanus. Not uncommon.

BELTED KINGFISHER. Ceryle alycon. Seen and heard along the Cranberry River at the lower cnd of the glades.

HAIRY WOODPECKER. Dryobates villosus villosus. Common on the wooded ridges above the glades.

DOWNY WOODPECKER. Dryobates pubescens medianus. Abundant throughout the region.

YELLOW-BELLIED SAPSUCKER. Sphyrapicus varius varius. This species appears to be a summer resident, since it was heard frequently on all three trips.

NORTHERN PILEATED WOODPECKER. *Phloeotomus pileatus abieti*cola. The rolling notes of the big Pileated often come down from the higher ridges above the glades. Frequently seen flying from one mountain-side to the other.

RED-HEADED WOODPECKER. *Melanerpes erythrocephalus*. Not uncommon.

RED-BELLIED WOODPECKER. *Centurus carolinus*. Probably fairly common. Seen several times on the September, 1925, visit.

NORTHERN FLICKER. Colaptes auraius luteus. Common.

WHIP-POOR-WILL. Antrostomus vociferus vociferus. The dense alder thickets bordering the glades form a cover from which Whippoor-wills may sometimes be flushed in daytime. Commonly heard.

NIGHTHAWK. Chordeiles virginianus virginianus. Abundant in their fall flight September 7, 1925.

CHIMNEY SWIFT. Chaetura pelagica. There being no permanent human habitations near the glades, we wondered at the abundance of this bird, and just how far it kept up its habit of nesting in hollow trees. At the lower end of the glades, in 1914, stood a large abandoned lumber camp. In connection with this had been an open blacksmith shop with the forge set against the board wall. This wall had become heavily covered with soot, and plastered to this wall we found, to our delight, several nests of the swift. Thus had the birds taken advantage of every opportunity to show their preference for the artificial conditions.

RUBY-THROATED HUMMINGBIRD. Archilochus colubris. Common. A nest. with eggs, found May 27, 1926. in a red spruce. The nest was placed on a tuft of "Reindeer Moss".

KINGBIRD. Tyrannus tyrannus. Apparently not very common. but seen several times around the crataegus thickets.

CRESTED FLYCATCHER. Myiarchus crinitus. One pair seen in deciduous woods May 27, 1926.

PHOEBE. Sayornis phoebe. Common about the abandoned lumber camps.

OLIVE-SIDED FLYCATCHER. Nuttalornis borealis. This fine flycatcher makes himself conspicuous all around the glades. Selecting the topmost twig of a spruce or balsam, he sends his unmistakable "Come right here" note out to greet you long before you reach the glades themselves. This locality is one of the few places in the state where one can be sure of finding the bird at any time during the summer.

WOOD PEWEE. Myiochanes virens. Fairly common.

ACADIAN FLYCATCHER. *Empidonax virescens*. This is not good country for the Acadian, but he can be found along the beech-bordered streams of the uplands. Not seen about the glades themselves.

ALDER FLYCATCHER. Empidonax trailli alnorum. This species is here nearing its southern breeding limit. and it is surprising to find it so abundant. Whether or not it may be a coincidence, in June, 1914, and in May. 1926, old nests with young of this species dead were found. Two nests were located each year, each nest having two or three dead young birds in it. No explanation is offered.

LEAST FLYCATCHER. *Empidonax minimus*. Abundant. During the first week of June, 1914, four nests with eggs were found in the glades region.

BLUE JAY.' Cyanocitta cristata cristata. Common throughout the region.

NORTHERN RAVEN. Corvus corax principalis. The raven is rare in West Virginia, but it may be seen occasionally near the glades. Four were watched and heard June 6, 1914, and a fine opportunity for comparison was offered when a crow obligingly attacked them.

One of the striking features of bird life in the region covered by this paper is the large number of "wild-sounding" notes to be heard day and night. Hawks, owls, jays, and flycatchers all contribute, but by far the most impressive is the croak of the raven.

CROW. Corvus brachyrhynchos brachyrhynchos. Common.

BOBOLINK. Dolichonyx oryzivorus. A pair, doubtless late migrants, observed May 27, 1926. Bobolinks pass through the central part of the state in spring migration during late April, and these had lingered beyond their season apparently. Although known to breed in the state, the only known locality is in some two hundred miles northwest of the Cranberry region.

COWBIRD. *Molothrus ater ater*. An egg of this parasite in the nest of a Song Sparrow in 1926, was proof of its presence.

RED-WINGED BLACKBIRD. Agelaius phoeniceus phoeniceus. Common along the water-courses.

BRONZED GRACKLE. Quiscalus quiscula aeneus. A few seen.

PURPLE FINCH. Carpodacus purpureus purpureus. The presence of this bird in considerable numbers in June, 1914, would seem to indicate that it breeds here. Young were seen September 7, 1925.

GOLDFINCH. Astragalinus tristis tristis. Abundant.

VESPER SPARROW. *Pooecetes gramineus gramineus*. Found in the park-like uplands.

WHITE-THROATED SPARROW. Zonotrichia albicollis. One heard singing May 24, 1926. There is no West Virginia breeding record for this species.

CHIPPING SPARROW. Spizella passerina passerina. Common around the crataegus groves.

FIELD SPARROW. Spizella pusilla pusilla. In the grassy uplands. CAROLINA JUNCO. Junco hyemalis carolinensis. Abundant throughout.

Song Sparrow. Melospiza melodia melodia. Very common.

SWAMP SPARROW. *Melospiza georgiana*. Perhaps the most abundant bird in the glades proper. Several nests were found in May, 1926. On moonlit nights this bird sings as freely as in the daytime.

TOWHEE. Pipilo erythrophthalmus erythrophthalmus. Fairly common on the ridges.

CARDINAL. Cardinalis cardinalis cardinalis. Rare at this altitude, where its place is taken by the Rose-breasted Grosbeak. One seen September 7, 1925. ROSE-BREASTED GROSBEAK. *Hedymeles ludovicianus*. Quite common summer resident. One of the most showy features of the landscape.

INDIGO BUNTING. *Passerina cyanea*. Only one seen here, where the surroundings do not suit it. Seen in blackberry thicket September 7. 1925.

SCARLET TANAGER. *Piranga erythromelas*. Several seen in the higher regions around the glades.

TREE SWALLOW. Iridoprocne bicolor. Many seen in September. 1925.

BANK SWALLOW. *Riparia riparia*. Common along the Cranberry river below the glades.

CEDAR WAXWING. Bombycilla cedrorum. This species was observed several times feeding on the tent caterpillar larvae which abounded on the wild cherry. Common at all seasons visited.

RED-EYED VIREO. Vireosylva olivacea. Common on the chestnut and oak timbered ridges.

YELLOW-THROATED VIREO. Lanivireo flavifrons. In same localities as the last-named species, but less common.

MOUNTAIN SOLITARY VIREO. Lanivireo solitarius alticola. Frequently observed. Several specimens were taken to establish the record in 1914.

BLACK AND WHITE WARBLER. Mniotilta varia. Common in deciduous woods.

WORM-EATING WARBLER. *Helmitheros vermivorus*. A few seen in deep woods along small streams.

BLUE-WINGED WARBLER. Vermivora pinus. An exceedingly tame individual of this species visited our camp May 28, 1926. He allowed himself to be thoroughly examined at a distance of only a few feet. This was the only one seen.

GOLDEN-WINGED WARBLER. Vermivora chrysoptera. Many seen and heard in May and June. Evidently breeds here commonly.

NASHVILLE WARBLER. Vermivora ruficapilla ruficapilla. Not known to breed in Cranberry Glades, although it does breed commonly in a glady region about one hundred and fifty miles north. Many were seen in May, 1926.

YELLOW WARBLER. *Dendroica aestiva aestiva*. Found around the crataegus groves above the glades.

CAIRN'S WARBLER. Dendroica caerulescens cairnsi. Specimens matching the descriptions of this subspecies were taken in June, 1914. Doubtless the type form also occurs, but I have seen no specimens to back it up.

MAGNOLIA WARBLER. Dendroica magnolia. Common summer resident.

CHESTNUT-SIDED WARBLER. Dendroica pensylvanica. Apparently the most common warbler in the brushy thickets about the glades. During the times that birds sing here one is scarcely ever out of hearing of this species.

BLACKBURNIAN WARBLER. Dendroica fusca. Observed in June, so it probably breeds here. Seen also in May, 1926.

BLACK-THROATED GREEN WARBLER. Dendroica virens. Abundant summer resident.

OVEN-BIRD. Seiurus aurocapillus. Common on the dry ridges.

Northern Water-Thrush. Seiurus novaboracensis novaboracen.

sis. As the Chestnut-sided Warbler is abundant in brushy places, so the Northern Water-Thrush is along the wooded streams. Four, five, or six singing at one time is nothing unusual.

LOUISIANA WATER-THRUSH. Seiurus motacilla. Rare when compared with the last-named species. A few occur regularly.

MOURNING WARBLER. Oporornis philadelphia. An abundant warbler at the glades in June, 1914, this species was seen only once in May, 1926. On my first trip to the glades, that of June, 1914, our party managed to get lost for the greater part of the day. Carrying heavy packs, we wandered about through rhododendron and blackberry thickets for what seemed an illimitable number of miles, but late in the evening, to the accompaniment of a Veery serenade, we broke through a fringe of bushes to see the promised land of the glades before us. Suddenly our packs, and the miles we had carried them, were forgotten, for right in front of us there appeared a pair of warblers with bluish-gray heads and white eye-rings. When the male burst into full song we knew we had found the Mourning Warbler, one of the objects of our search.

MARYLAND YELLOW-THROAT. Geothlypis trichas trichas. Abundant in the whole glade region.

YELLOW-BREASTED CHAT. Icteria virens vireus. Not very common. HOODED WARBLER. Wilsonia citrina. Found in all the uplands of

the region.

CANADA WARBLER. *Wilsonia canadensis*. The Canada flashes his necklace in many of the thickets about the glades.

REDSTART. Setophaga ruticilla. Abundant at the times of all three visits.

CATBIRD. Dumetella carolinensis. Common.

BROWN THRASHER. Toxostoma rufum. Frequents the open spaces on the ridges.

CAROLINA WREN. Thryothorus ludovicianus ludovicianus. Common.

BEWICK'S WREN. Thryomanes bewicki bewicki. Not very common, but a few heard.

HOUSE WREN. Troglodytes aedon aedon. Frequently seen about the abandoned lumber camps. Much more common than the last.

WINTER WREN. Nannus hiemalis hiemalis. This tiny bit of condensed melody pours out his song from the thickest and dampest ravines of the region.

WHITE-BREASTED NUTHATCH. Sitta carolinensis carolinensis. Common on the ridges.

RED-BREASTED NUTHATCH. Sitta canadensis. Abundant summer resident.

TUFTED TITMOUSE. Baeolophus bicolor. Common.

CHICKADEE. Penthestes atricapillus atricapillus. Specimens taken here, together with the song, show this to be the northern Chickadee. rather than the Carolina Chickadee which is found in the lowlands of the state. The latter species probably occurs.

GOLDEN-CROWNED KINGLET. Regulus satrapa satrapa. Abundant in September, 1925. This species breeds regularly in the Red Spruce belt of the state.

BLUE-GRAY GNATCATCHER. *Polioptila caerulea caerulea*. Not uncommon in the dry woods above the glades.

WOOD THRUSH. Hylocichla mustelina. Of frequent occurrence.

VEERY. *Hylocichla fuscescens fuscescens*. Abundant wherever there is coniferous woods.

OLIVE-BACKED THRUSH. Hylocichla ustulata swainsoni. Common in June, 1914: not so common in May, 1926. Probably breeds here. as its nests have been found at no great distance.

HERMIT THRUSH. Hylocichla guttata pallasi. My only definite record for this species at Cranberry Glades was made on May 26, 1926, but its occurrence in summer as a breeding bird is probable. It is a common summer resident only a few miles to the north.

ROBIN. *Planesticus migratorius migratorius*. Common on the open uplands.

BLUEBIRD. Sialia sialis sialis. On the side of Black Mountain, above the glades is an open pasture field. and here, as might be expected, the Bluebird occurs.

FRENCH CREEK, WEST VIRGINIA.